



Partnership for Integrated Planning (PIP): Merced Pilot

Cumulative Impacts Advisory Panel 2002-2004

Merced Partnership for Integrated Planning Cumulative Impacts Advisory Panel

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Overview

The Cumulative Impacts Advisory Panel (Panel) was an interagency group convened to address agencies' mutual concerns about cumulative impacts analysis for transportation projects. The Panel met in a series of facilitated meetings to discuss ways that cumulative impacts could be addressed more effectively during regional transportation planning. Panel members came from regional, state and federal agencies (see Appendix A). The Panel met from February to November 2003, producing an Cumulative Impacts Analysis Outline of considerations for how to analyze the cumulative impacts of a Regional Transportation Plan (RTP) (see Appendix B).

The Panel focused its efforts on assisting the Merced County Association of Governments (MCAG) with the analysis of the cumulative impacts of MCAG's Regional Transportation Plan (RTP). In this way, the Panel became one of the components of the Partnership for Integrated Planning (PIP). The PIP program, implemented as a pilot in Merced County, California, is an innovative approach to early and collaborative engagement by federal, state and local agencies interested in ways to better integrate transportation, land use, and environmental planning. MCAG provided PIP with a real-world application for piloting early collaboration.

It was anticipated that the Panel's effort would result in recommendations for how to improve cumulative impacts analysis at the plan level. For PIP in particular, the Panel's recommendations would be used to improve the cumulative impacts analysis in MCAG's Environmental Impact Report (EIR) for its RTP. MCAG must prepare an environmental document for its RTP to comply with the requirements of the California Environmental Quality Act (CEQA).

Background

History of Program

In 2000, the United States Environmental Protection Agency (EPA), Federal Highway Administration (FHWA), and California Department of Transportation (Caltrans) entered into an historic partnership agreement to support cooperative and collaborative work in transportation and environmental planning processes. The Mare Island Accord stresses early coordination, cooperation, and an effective environmental process that incorporates environmental concerns, multi-agency participation in program level planning, increased flexibility of funding, and the opportunity to resolve issues before costly project development.

One of the partnership activities of the Mare Island Accord was the initiation of a pilot project with a Metropolitan Planning Organization (MPO), focusing on the development and use of planning tools to achieve environmental and transportation goals. This activity took the form of PIP in Merced County. MCAG was preparing for the revision of its three-year RTP, an effort that was well suited for the kind of collaboration and early engagement envisioned by the Mare Island Accord, and it agreed to participate in the Mare Island Accord pilot.

UPlan

One of PIP's components was to pilot the use of Global Information Systems (GIS) technology to improve regional transportation planning capabilities. The Information Center for the Environment (ICE) at the University of California, Davis (UC Davis), was contracted to assist the PIP pilot with the development of a GIS-based decision support tool. ICE customized an urban growth model developed at UC Davis called UPlan, a model used to evaluate the land development impacts of transportation projects.

UPlan develops growth scenarios by overlaying GIS data layers to predict land use allocation and patterns in the most attractive and least environmentally damaging areas. The model allows the user to test the effects of land use and transportation policies and analyze environmental impacts. The user sets certain features based on assumptions regarding attractions and discouragements to growth; some of these assumptions are standard modeling principles. The user also sets features to buffer or mask protected areas so the model does not allocate growth there. For instance, a user would buffer a resource such as a wetland, or mask a current urban area that is already built out, so the model would not allocate growth in those areas.

This holistic look at the effects of transportation and land use decisions makes it particularly well suited for cumulative impacts analysis. It allows cumulative impacts to be explored in a way that is not typically available without the use of GIS modeling, largely because of its extensive use of data.

MCAG's use of UPlan provided a broad look at the projected footprint of growth in Merced County. Data layers were compiled from many sources, including resource agencies that were invited to contribute data layers and provide rankings of resources to help MCAG know the agencies' priorities. This information was represented in the settings applied in UPlan and reflected in the scenarios that resulted. The outreach to resource agencies for input on data and rankings was a new way to bring resource agencies into the RTP development process. It was a part of PIP's early collaboration. MCAG analyzed the different scenarios generated by the model. Potential effects, including cumulative impacts, were then compared to a status quo or no-change alternative of the RTP. The results were presented in the EIR.

The Panel found that UPlan or a similar GIS-based tool is invaluable for plan-level cumulative impacts analysis for many of the reasons noted above, in particular its broad, regional approach to representing data; its ability to overlay many kinds of data at a regional level; and its increasing practicality in terms of cost and access. The Outline (see Appendix B) provides specific suggestions as to how GIS-based data can be useful for plan-level cumulative impacts analysis.

The Cumulative Impacts Analysis Component

ICE was also contracted by Caltrans to develop and facilitate the meetings of the Cumulative Impacts Advisory Panel. Panel members were drawn from the agencies that most commonly prepare or comment on cumulative impacts analyses. The project period was July 1, 2001 to April 1, 2004. ICE convened the Panel, and a facilitator from Common Ground: Center for

Cooperative Solutions, at UC Davis Extension, facilitated the group discussions as a subcontractor to ICE. ICE conducted administrative and management tasks under the contract, including ongoing project management, budget and contract management, report preparation, and coordination with the Caltrans project manager and the Panel facilitator.

The intent of the cumulative impacts analysis component was to conduct a series of workshops or group meetings to:

- Discuss cumulative impacts terminology, roles and responsibilities
- Address traditional problems in cumulative impacts analysis and mitigation
- Develop an approach for conducting cumulative impacts analysis in the EIR for the RTP, based on Panel members' collaborative input, and applicable to a plan level analysis

The Panel Experience

The planning and logistics for the Panel meetings were arranged by ICE in coordination with Caltrans' task order manager, who was also a Panel member. Once the meetings were under way, the facilitator also joined this coordinating team. Preliminary work consisted of identifying Caltrans' and MCAG's interests and needs, developing objectives for the effort, and brainstorming about the integration of the workshop results with the larger PIP project. The coordinating team then began to focus on agency participation and workshop design and content. As the workshop planning took place, it became clear that a workshop format would not achieve the desired outcomes: it would entail assembling a large group and using a presentation-based format. Instead, the desired results would be better achieved in a smaller group setting, using a more conversational and interactive format. Out of this came the decision to hold a series of facilitated meetings among a small group of high level staff from key federal and state agencies involved with cumulative impacts analysis. The idea of conducting "facilitated conversations" about cumulative impacts analysis took shape.

The next phase of project development involved identifying and securing the commitment of agency participants. The coordinating team identified and prioritized the key agencies it wanted to participate in the Panel, with input from the PIP Steering Committee. The selection was based on the degree of involvement these agencies had historically shown in the analysis of cumulative impacts for transportation projects. Once these agencies had been identified and prioritized, the coordinating team sought suggestions for potential agency representatives to the Panel, and ICE worked toward securing a commitment of participation. The Cumulative Impacts Advisory Panel (Panel) was convened in February 2003, with staff from Caltrans, EPA, FHWA, MCAG, the United States Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration - Fisheries (NOAA Fisheries), and the United States Army Corps of Engineers (Corps) (see the roster in Appendix A).

ICE planned and organized a total of eight Panel meetings (six 1-day meetings and one 2-day meeting). With the exception of one meeting, held at MCAG's offices in Merced, California, the meetings were held on campus at U.C. Davis.

While the coordinating team provided a framework to guide the effort, it recognized the importance of giving the Panel an opportunity to develop its own goals. One of the Panel's first tasks was to develop a mission statement to guide its work. The coordinating team was initially interested in exploring the potential for developing some kind of statewide policy regarding cumulative impacts analysis, but that shifted as the mission statement took shape. The Panel chose not to take on the task of formulating statewide policy: members were not authorized to promulgate policy; several members represented offices that did not have jurisdiction over the entire State; and the sheer scope of such an undertaking was deemed unrealistic within a limited time frame. The Panel had substantive discussions about an appropriate and reasonable mission and set of objectives. Given the timeframe, context, and Panel membership, its considerations included:

- What was a feasible, realistic goal for the group?
- What were the perspectives of the different agencies regarding cumulative impacts analysis?
- What were MCAG's needs in preparing the environmental documents for its RTP?
- What was the original concept for this effort?

Arriving at a mission statement that reflected the collective sense of what should be the Panel's work proved to be the Panel's first challenge. The mission statement went through several iterations before arriving at the following final version:

“The mission of the Cumulative Impacts Advisory Panel is to develop guidelines tailored to regional planning level cumulative impacts analysis, including a methodology for identifying mitigation responsibility for potential impacts and possible mitigation strategies for application to the Merced Partnership for Integrated Planning (PIP) pilot process.”

The Panel decided its approach would be to develop guidance for MCAG in preparing the cumulative impacts analysis for its RTP environmental document on a *regional basis* at a *planning level*, both of which are unprecedented approaches. Cumulative impacts are usually analyzed during the programming and environmental evaluation of individual projects. Resource and regulatory agencies review cumulative impacts analyses as part of their project-level environmental reviews. At that phase, individual projects are already well framed, modifications are more difficult, and it is harder to discern the relation of an individual project to other actions in the region.

The mission adopted by the Panel matched well with the original intent of the cumulative impacts analysis effort which recognized the RTP as an excellent opportunity to analyze cumulative impacts: the scope of cumulative impacts analysis is properly regional; it allows for modification of alternatives if significant cumulative impacts are identified; and, project-level analysis can refer back to and build upon regional plan analysis. Also, use of UPlan and early collaboration with participating agencies meant that data needs would be identified and met in a more comprehensive and coordinated manner.

The focus on MCAG in the mission statement gave the Panel a practical task with a limited scope. The task also took on a human dimension through MCAG's participation. Other

members' interest in learning more about MCAG and finding ways to help the MCAG Panel member also increased their willingness to participate, and on many occasions it also helped the Panel refocus its discussions.

The Panel chose to prepare its guidelines in the form of a recommended outline for plan-level cumulative impacts analysis. While the outline was designed with MCAG in mind, the Panel took care to word the outline so that other agencies would also be able to apply it to their own plan-level analyses. In crafting the outline, the Panel attempted to develop an approach and methodology to better address environmental concerns and the requirements of reviewing agencies at the plan level, while still providing reasonable and appropriate analysis.

The Panel's work was conducted in an unfamiliar context; that is, many of the Panel members were well acquainted with project-level review of cumulative impacts, but they were not familiar with the RTP process, while the members that knew about RTPs were not familiar with cumulative impacts analysis. As a result, each of the members was in a learning environment. One striking aspect of this learning environment was the participation of the federal agencies. While these Panel members did not have jurisdiction over the EIR that MCAG was preparing pursuant to CEQA, they valued the opportunity to explore how cumulative impacts could be more effectively addressed at a regional plan level.

As the Panel developed its mission and workplan, it also reviewed and discussed cumulative impacts definitions, the different agency roles in cumulative impacts analysis, and the regulatory framework. These were valuable steps in providing mutual education of Panel members and beginning the effort with a common understanding of the context and issues. The information provided by Panel members and through the research conducted was summarized in two matrices (see Appendix C). Other information provided to the Panel to assist in their discussions were a synthesis of background materials about cumulative impacts analysis, a list of acronyms, a glossary, and material on existing cumulative impacts analysis guidance. The Panel also reviewed other guidelines, protocols and methods as it developed its guidance document for MCAG; the Panel did not want to reinvent the wheel or duplicate other recent efforts at developing guidance.

The Panel member from MCAG made two presentations that provided important background information to the other Panel members. The first was a briefing on Merced County and MCAG's RTP process, which was new to most of the other Panel members. The second presentation showed how MCAG was using data from UPlan in its public outreach meetings, and how this was helping with the development of the scenarios (alternatives) for the RTP.

As the Panel's work progressed, Panel members turned their attention to the EIR itself. Caltrans had arranged for one of its District staff to prepare MCAG's EIR. The Panel initially asked the EIR writer to attend as an observer, to listen to the discussion and incorporate the Panel's ideas into the development of the EIR. In short order, however, it became clear that the writer had a more meaningful role to play. The writer contributed valuable feedback about the practicality and feasibility of the recommendations being proposed in the Outline. This was important for Panel members to hear and often resulted in productive discussion and wording

changes to the guidance. The Panel's work was much more grounded in reality because of the writer's participation.

The development of a Cumulative Impacts Analysis Outline as the guidance document evolved from the review of existing materials that had been distributed to the Panel. As a starting point, the Panel turned to an outline that had been developed at an FHWA Western Territory Cumulative Workshop held in 2001. That document served as an initial foundation for the guidelines the Panel sought to develop. The Panel began with the resource areas listed in that earlier outline and then modified and expanded on that list. Ultimately, the Panel crafted and shaped its own outline (see Appendix B). In the process of developing the content of the outline the Panel discussed each resource area in turn, seeking consensus about definitions, the appropriate scale of analysis at a plan level, the appropriate type and extent of information, and methodologies.

Several iterations of the Outline were developed. Some of the more challenging questions and issues that arose involved criteria for cumulative impacts analysis at the plan level: when is enough data enough? Questions surrounding temporal boundaries and baseline determination spurred hearty discussion among the members. The Outline reflects the Panel's best attempt to grapple with the essence of many of these questions and arrive at mutually acceptable language that represented and respected the different agency needs and missions.

Before finalizing the Outline, the Panel members requested their agencies to review and comment on the draft Outline. Several agencies provided feedback, which was incorporated into the final version of the Outline.

Reflections on the Panel Effort

Reflections from the Coordinating Team

ICE, the Caltrans task order manager and the Panel facilitator noted the workings of the Panel. Members worked together very well, reached agreement on issues early on, brought the right mix of expertise and background to the table, and were individually committed to the project. The Panel engaged in robust discussions that were illuminating, engaging and productive. Comments offered by Panel members suggest this was a shared impression of the experience.

The Panel was initially charged with a broad task. One of the challenges for the coordinating team was how to enable the group to take ownership and refine its task. ICE, Caltrans, and the facilitator discussed at length which areas of the effort were constrained, and which were open to refinement. The Panel's constraints included a fixed timeframe, a stipulated context for the work, and a pre-determined set of participants. Within those constraints, the Panel was free to challenge or alter the broad task; decide on meeting logistics; further define the process; and, most importantly, specify the contents of its products.

During the first three meetings, the Panel members became acquainted, developed a mission statement, discussed background and logistics, and began their work. To assist the meeting process, the facilitator proposed a set of ground rules that the Panel modified slightly. While the

tenor and environment of the Panel's engagement was overall very positive and cooperative, even the development of ground rules and a mission statement were not "rubber stamp" activities, but the Panel did reach consensus and was able to move forward. As a result of these introductory activities, substantive work by the Panel did not really begin until the third and fourth meeting. The coordinating team worked to ensure that the Panel had enough time to accomplish its mission and stay focused on developing a product of maximum utility for MCAG.

As the Panel's work progressed, it became clear to the coordinating team that more meetings would be needed than the "up to six workshops" originally stipulated by the contract. Ultimately, the Panel met eight times, with one meeting conducted as a two-day session. Panel members expressed an interest and willingness to meet on a more regular basis, and for a full day wherever possible, in order to maintain momentum and to better provide MCAG with the input the agency needs to complete RTP environmental documents. This willingness to maintain the momentum and to schedule additional meetings reflected the interest in and high level of commitment to the effort by Panel members.

The participation of the EIR writer was important to the outcome of the Panel's efforts. He helped the Panel to reshape its outline through his practical feedback. His participation also gave the Panel the most direct way to shape the contents of the cumulative impacts analysis chapter of the EIR; he was able to apply several of the Panel's recommendations in his analysis.

The ultimate usefulness of the Panel's recommendations will be seen during the reviews of cumulative impacts analyses for the individual transportation projects in MCAG's RTP. The Panel members recognized this and expressed interest in follow-up at a later time.

Panel Reflections

As the Panel completed its work, members reflected on their experience participating in the effort. Their comments reflected what they learned about the attempt to address cumulative impacts at the plan level on a regional basis. They also gave feedback about the Panel process and experience. The reflections listed below are unedited comments from Panel members taken directly from meeting notes.

With respect to the Panel experience, Panel members provided the following feedback:

- Would have been beneficial to have more stakeholders in more resource areas in the room (participating and represented in process) such as cultural resources, air quality
- Would have been easier to have more defined and tangible task at beginning. At same time, it was also helpful for Panel's work not to be too circumscribed.
- Reflections on mission statement:
 - Mitigation language
 - Would be hard to do for Cumulative Impacts alone
 - Reads as if it is project specific
- Panel could not have completed its work until MCAG EIR is done; effectiveness of this approach to cumulative impacts analysis won't be known until after the documents are prepared and we see what the outcome is.

- Remove 3 words, “Mitigation responsibility for” (project specific), then Panel came very close to completing its mission
- Still to be done – fleshing out Outline concepts can be done once EIR is complete
- Need dialogue after EIR is complete.
- In future, distribute fleshed out Outline with Cumulative Impacts chapter of EIR
- Accomplishments
 - High degree of cooperation, low defensiveness
 - Participation consistent; high level of engagement
 - Happy with product – balanced needs with practical reality
 - Education – what needs to be considered in this process
 - No one left screaming
 - Covered a lot of material; tackled a big issue and new ground
 - Created an actual product
 - Product represents all voices in the room

Panel members offered the following comments about addressing cumulative impacts analysis:

- Need to look carefully at implications of early planning
 - What vulnerabilities does it induce?
 - What are the incentives and disincentives to participate?
- Make it easier for federal agencies to be involved in early planning
 - Provide legitimacy for the efforts of individuals
 - There’s a need for a process to surface and address barriers to participation for federal agencies, including funding, blessing of the outcome, time commitments, and bad experiences
- Progress is incremental and sometimes you wind up in a different, yet still productive, place than you expected.
- Would be helpful for resource agencies to have GIS data that’s usable, collected, integrated, credible, and in one location to house and maintain it
- With respect to GIS and data – include data for absence of occurrence of cultural and biological resources
- Expand scope of federal nexus; codify federal involvement in transportation planning process so process is streamlined
- Need protocols/guidelines for when analysis is enough

Additionally, Panel members provided the following input to the PIP Steering Committee regarding the engagement of stakeholders in a plan-level effort:

- Create a direct link between agency benefit (FTE hours saved) and time invested. To degree possible, get actual numbers as plan moves forward. Create infrastructure to capture the numbers.
- Describe benefits to agencies up front
 - No surprises
 - Save \$ and time
 - Relationship-building
 - Education

- Facilitate implementation via involvement with a local face
- Builds trust, understanding and perspective
- Greater awareness of opportunities
- It's important who participates; possible criteria include:
 - Open outlook (some resistance is ok)
 - Proactive
 - Capacity to communicate (externally and internally)
 - Appropriate experience
 - Individual interest served by involvement (learning experience, belief in mission, personal relationships, etc.)
 - Desire to build trust, understanding and perspective
- Build in redundancy for team make-up – two people per agency if possible

Evaluation

In its closing session, Panel members provided feedback about what they thought worked and didn't work in the process. Their evaluation comments were:

- Positives
 - Having a series of conversations with agencies
 - Having a convenor and facilitator to keep us organized and moving
 - No physical violence ☺
 - Having real application to work with
 - Having the Caltrans staff who will be preparing the EIR join the Panel
 - Right people are here
 - Meeting location away from offices
 - Provided momentum for complementary efforts
- Could be changed
 - With spacing between meetings, hard to jump back in
 - Travel hard for whole day meetings
 - Making sure everyone with same baseline knowledge before first meeting

There were many benefits to the Panel effort. The forum of facilitated meetings with a small group of key agency representatives allowed meaningful and rich discussion of a number of historically difficult and divisive issues surrounding the analysis of cumulative impacts. New relationships between agency staff were forged and existing relationships were strengthened. Particularly noteworthy is that relationships were forged between staff from federal and regional government. Relationships among all the participating agencies were enhanced.

Panel members developed a clearer understanding of agency regulatory jurisdictions, perspectives and practices regarding cumulative impacts analysis. They identified and discussed some of the inherent problems in conducting and meeting the goals of cumulative impacts analysis.

The Panel's work can be considered largely a success in terms of meeting project objectives and fulfilling the group's mission. The Cumulative Impacts Analysis Outline was applied to a great

extent in the preparation of MCAG's EIR, resulting in a better Cumulative Impacts chapter with more analysis across alternatives than is typically included in environmental documents for RTPs. The Outline has universal application for other transportation planning agencies, councils of governments, and metropolitan planning organizations.

Participation in the Panel has broken down interagency barriers, challenged some traditional adversarial relationships, built trust, and increased exchange of ideas and data. MCAG received additional data from other participants that might otherwise not been identified or made available absent the Panel's effort. The experience also made clear the dynamic between a regional agency's data limitations and resource agencies' desire for more information. Mutual understanding of that dynamic was fostered through the Panel's discussions.

The effort was unprecedented with respect to its focus on arriving at an approach to analyzing cumulative impacts at a regional, plan level. Environmental and project delivery staff with agencies and organizations are accustomed to project-level cumulative impacts analysis. In this case, the Panel was required to think about cumulative impacts analysis in a very different way. Asking resource and regulatory agencies for input to regional impact analysis, rather than asking them to respond to project-level documents, has been a paradigm shift. Also, no statutory or regulatory process otherwise brings federal resource and regulatory agencies together with state agencies and a MPO to coordinate on environmental issues. This called for continual rethinking of the appropriate framework for analysis at a plan level. The Panel met that challenge.